IN THE CLAIMS:

Claim 6 (Twice Amended): In combination for controlling the operation of an individual one of a plurality of vehicles,

a first pad included in a plurality of pads and including a first switch operable in a pattern providing an address of the individual one of the plurality of vehicles and including a plurality of switches individually operable in a pattern providing for an operation[s] of the individual one of the vehicles in accordance with the pattern of operation[s] of such switches,

means in the first pad for providing a plurality of light indications each for a particular one of the vehicles in the plurality,

means in the first pad for providing first light indications for the vehicles in the plurality when such first pad has not provided an address for any of the vehicles in the plurality, and

means in the first pad for providing a second illumination for the individual one of the vehicles when the first pad provides the address for such individual one of the vehicles,

the first pad including an additional switch having first and second states of operation and operative in the first state to provide for an operation of the individual one of the vehicles only by the first pad and operative in the second state to provide for an operation of the individual one of the vehicles by [other] another one of the pads in the plurality in addition to the first pad.

Claim 7 (Twice Amended): In a combination as set forth in claim 6,

each of the pads, other than the first pad[s], including a switch corresponding to the first switch in the first pad and sequentially operative to select successive ones of the vehicles in the plurality, and

means responsive in each of the pads to the sequential operations of the switch in the pad for skipping the addressing by the pad of a vehicle in the plurality which has already been addressed by another one of the pads in the plurality.

Claim 9 (Twice Amended): In combination for operating a vehicle in accordance with addresses and commands provided by a pair of pads and transmitted by a central station to the vehicle,

means in the vehicle for receiving the addresses and commands provided by the pads and transmitted by the central station,

means in the vehicle for identifying the addresses received from the pads as those of the vehicle,

means responsive in the vehicle to the identification of the addresses received from the pads as those of the vehicle for executing the received commands from the pads when the received commands from [the pair of the] pads are complementary, and

means responsive in the vehicle to the identification of the addresses received from [the pair of the] pads as those of the vehicle for ignoring the commands received from the pads when the received commands are contradictory.

Claim 20 (Twice Amended): In combination for use with a central station and a plurality of vehicles for selecting and operating individual ones of the vehicles in accordance with addresses and commands provided by the central station,

a pad in a plurality of pads,

a first switch in the pad, the first switch having first and second states and operable on a repetitive basis to the second state for a particular number of times to select an individual one of the vehicles to be addressed by the central station,

a plurality of additional switches in the pad, the additional switches having first and second states and operable to the second state in a particular pattern to obtain the operation of the individual one of the vehicles in accordance with the pattern of operation of the additional switches in the second state,

a plurality of light indications in the pad, each of the light indications being associated with a different one of the vehicles in the plurality,

means for energizing the light indications in sequence <u>in accordance with the sequential</u> [on a cyclic basis before any] operations of the first switch in the pad to the second state to select the individual one of the vehicles in the plurality,

means for continuously energizing the individual one of the light indications associated with the individual one of the vehicles when the first switch in the pad has been operated to the second state on the <u>sequential</u> [repetitive] basis for the particular number of times to select the individual one of the vehicles to be addressed by the central station, and

means for skipping the energizing of the light indications associated with the vehicles addressed by the pads in the plurality other than the pad when the first switch in the other pads is operated on the repetitive basis to address the individual one of the vehicles.

Claim 25 (Twice Amended): In a combination as set forth in claim 23,

the first means being operative to eliminate from interrogation by the central station of any one of the pads disconnected in the plurality from the central station and to provide such elimination at the instant that the pad is disconnected from the central station and without affecting the interrogation of the other pads by the central station and to provide for the addressing by any of the pads, other than the disconnected pad, of the vehicle previously addressed by the disconnected pad.

Claim 29, line 4, after "plurality" insert –only–.

Claim 43 (Twice Amended): In combination for use in a vehicle for moving the vehicle in accordance with commands which are provided by a pad to control the movements of the vehicle and which are converted by a central station to commands addressed by the central station to the vehicle to obtain the movements of the vehicle,

a pair of left wheels in the vehicle, the left wheels being spaced from each other in a longitudinal direction,

a pair of right wheels in the vehicle, the right wheels having the same spacing in the longitudinal direction as the left wheels,

a first motor in the vehicle for moving the left wheels in the vehicle in the longitudinal direction,

a second motor in the vehicle for moving the right wheels in the vehicle in the longitudinal direction,

the commands addressed to the vehicle from the central station including first signals for operating the first motor and second signals for operating the second motor,

first means in the vehicle for receiving the commands addressed to the vehicle from the central station,

second means responsive in the vehicle to the first and second signals received by the vehicle from the central station for operating the first and second motors in accordance with such signals, [and]

the vehicle being operative in a powered and active state and in a powered and inactive state,

third means responsive in the vehicle to the failure of the vehicle in the powered and active state to receive the first and second signals for a particular period of time for maintaining the same operation of the first and second motors for such particular period of time as the operation of the motors upon the last reception by the vehicle of the first and second signals from the central station[.], and

fourth means operative at the end of the particular time period for converting the operation of the vehicle from a powered and active state to a powered but inactive state when the vehicle fails to receive the first and second signals during the particular time period.

Claim 44 (Twice Amended): In a combination as set forth in claim 43,

the particular time period constituting a first particular time period,

[fourth] fifth means responsive in the vehicle to the first and second signals received by the vehicle from the central station for accelerating the first and second motors in progressive increments to the speeds commanded by the central station to such motors for movement of the vehicle in the longitudinal direction[.],

the vehicle being constructed to be commanded by any one of a plurality of pads each associated with the central station to provide for the addressing by the central station to the vehicle of first and second signals from the pad, and

sixth means operative at the end of a second particular time period for converting the operation of the vehicle from the powered but inactive state to a depowered state when the vehicle fails to receive the first and second signals from the central station for any of the pads in the plurality during the second particular time period.

Claim 45 (Twice Amended): In a combination as set first in claim 43,

[fourth] fifth means responsive in the vehicle to the first and second signals received by the vehicle from the central station for operating the first and second motors in accordance with such first and second signals only when the first means [receiver] has received the same first and second signals from the central station a plurality of successive times.

Claim 46 (Twice Amended): In combination

a plurality of pads,

a plurality of vehicles,

each of the pads providing first binary indications representing an address of any individual one of the vehicles and second binary indications representing individual operations to be provided by such vehicle,

a central station responsive to the first and second binary indications from the different pads for producing for each of the pads first signals providing an individual address for the individual one of the vehicles addressed by such pad and second signals providing commands for moving such vehicle in a particular direction and for operating such vehicle,

means responsive in each of the vehicles to the first signals addressing such vehicle from the central station and to the second signals from the central station for such vehicle for moving such vehicle and operating such vehicle in accordance with the commands provided by the central station to such vehicle, [and]

means operative in each of the vehicles for continuing to provide a movement of such vehicle for a particular period of time in accordance with the last commands addressed to such vehicle by the central station when the vehicle fails to receive any commands addressed to such vehicle during such particular period of time[.],

each of the vehicles being operative in a powered and active state and in a powered but inactive state,

means operative in each of the vehicles for converting the vehicle from the powered and active state to the powered and inactive state at the end of the particular period of time when such vehicle fails to receive any commands addressed to such vehicle during such particular period of time.

Claim 47 (Twice Amended): In a combination as set forth in claim 46,

means in each of the vehicles for providing for a change in [an operation of] such vehicle [in] from the [an] inactive but powered state to a depowered state at the end of [the] a second particular period of time when such vehicle fails to receive any commands addressed to such vehicle from the central station for any of the pads during such second particular period of time.

Claim 54, line 5, after "the" add –successive–.

line 11, before "packets" insert –successive–.

Claim 55, line 17, after "the" add –successive–.

line 22, before "packets" insert –successive–.

Claim 57, line 13, after "vehicle" delete "on the cyclic basis".

Claim 58 (Twice Amended): In a combination as set forth in claim 57 wherein the successive ones of the second signals are addressed to the vehicle on a cyclic basis and wherein

the third means in each of the vehicles is operative to operate such vehicle in accordance with the second ones of the second signals addressed to such vehicle on the cyclic basis when the second means in such vehicle determines that the successive ones of the second signals addressed to such vehicle on the cyclic basis are identical.

Claim 61 (Twice Amended): In combination in a vehicle for use with a central station operative to receive, from a plurality of pads, first binary indications representing the address of the vehicle and second binary indications representing operations to be performed by the vehicle and for sending first signals in accordance with the first binary indications and second signals in accordance with the second binary indications,

first means in the vehicle for receiving the first and second signals from the central station in representation of the binary indications from each of the pads,

the first and second signals for the vehicle being in the form of packets each having a first particular number of the first signals and a second particular number of the second signals,

second means in the vehicle for determining whether at least a particular percentage of [the] successive packets addressed to the vehicle during a particular period of time has the second particular number of the second signals in such packets, and

third means in the vehicle for operating the vehicle in accordance with the second signals in the packets addressed to such vehicle when the second means in such vehicle determines that at least the particular percentage of the packets addressed to such vehicle during the particular period of time has the second particular number of the second signals in the packets.

Claim 101 (Twice Amended): In combination for use with a plurality of vehicles,

a plurality of pads each operative to provide a first plurality of binary indications addressing any individual one of the vehicles and to provide a second plurality of binary indications providing commands to such individual one of the vehicles for operating such vehicle,

a central station,

the pads in the plurality being connected to the central station,

first means in the central station for interrogating the pads to determine the first and second binary indications from such pads,

second means in the pads for transmitting the first an second binary indications from the pads to the central station, and

third means responsive in the central station to the identities of the first binary indications in successive transmissions of the first and second binary indications from each individual one of the pads to the central station for transmitting to the vehicles signals representing the first and second binary indications for such pad,

fourth means in the central station for providing a transmittal by the second means at each instant only of the second binary indications from the pads which are providing changes in address or commands at that instant, [In a combination as set forth in claim 100,]

an additional pad being connected to the central station, and

fifth means in the central station for providing for an addressing by the additional pad of any of the vehicles not being addressed by the pads in the plurality and for providing for a transmission by the third means of the signals representing the first and second binary indications for the additional pad to the vehicles in the plurality instantaneously after the additional pad is connected to the central station.

Claim 102 (Twice Amended): In combination for use with a plurality of vehicles,

a plurality of pads each operative to provide a first plurality of binary indications addressing any individual one of the vehicles and to provide a second plurality of binary indications providing commands to such individual one of the vehicles for operating such vehicle,

a central station,

the pads in the plurality being connected to the central station,

first means in the central station for interrogating the pads to determine the first and second binary indications from such pads,

second means in the pads for transmitting the first and second binary indications from the pads to the central station, and

third means responsive in the central station to the identities of the first binary indications in successive transmissions of the first and second binary indications from each individual one of the pads to the central station for transmitting to the vehicles signals representing the first and second binary indications for such pad,

fourth means in the central station for providing a transmittal by the second means at each instant only of the second binary indications from the pads which are providing changes in address or commands at that instant, [In a combination as set forth in claim 100,]

the first means in the central station being operative to interrogate the pads on a cyclic basis to obtain the binary indications from each of the pads, on the cyclic basis with the other pads, of the individual one of the vehicles addressed by such pad and the binary indications for providing commands for operating the individual one of the vehicles.

Claim 108 (Twice Amended): In combination for use in a system including a plurality of vehicles each responsive to an individual address and to a plurality of commands for providing individual operations of the vehicles in accordance with such commands,

a plurality of pads each operative to provide an address for selecting any individual one of the vehicles and to provide commands to such individual one of the vehicles for operating such individual one of the vehicles in accordance with such commands,

a central station, the pads being connected to the central station,

first means in the central station for interrogating the pads to determine the address and the commands provided by such pads,

second means responsive in the central station to the interrogation provided by the first means in the central station concerning the address and the commands from each pad for receiving the address and the commands from such pad and for transmitting to the vehicles signals representing the address and the commands from such pad, and

third means responsive in the central station to any change in the address or commands from an individual one of the pads for transmitting the address and the commands from such pad to the vehicles in the plurality on a priority basis relative to the address and commands from the other pads in the plurality.

Claim 111 (Twice Amended): In combination for use in a system including a plurality of vehicles each responsive to an individual address and to a plurality of commands for providing individual operations of vehicles in accordance with such commands,

a plurality of pads each operative to provide an address for selecting any individual one of the vehicles and to provide commands to such individual one of the

vehicles for operating such individual one of the vehicles in accordance with such commands,

a central station, the pads being connected to the central station,

first means in the central station for interrogating the pads to determine the address and the commands provided by such pads,

second means responsive in the central station to the interrogation provided by the first means in the central station concerning the address and the commands from such pads for receiving the address and the commands from such pads and for transmitting the address and the commands from such pads to the vehicles in the plurality, and

third means responsive in the central station to the connection of an [individual one of the] additional pad[s], other than the pads in the plurality, to the central station and to the reception by the central station of the address and commands from such [individual one of the] additional pad[s] for initially transmitting such address and commands from such [individual one of the] additional pad[s] to the vehicles on a priority basis relative to the transmission of the address and commands from the [other ones of the] pads in the plurality [to the vehicles.]

Claim 113 (Amended): In a combination as set forth in claim 111 wherein

the central station transmits the address and commands from the [individual one of the] additional pad [stations in the plurality] to the vehicles in the plurality only when the central station has completed the transmission to the vehicles in the plurality of the address

and commands of the pad in the plurality whose address and commands the central station has been transmitting to the vehicles at the time that the central station receives th address and the commands from the additional pad [individual one of the pads in the plurality].

Claim 128 (Twice Amended): In combination,

a plurality of vehicles each having an individual address,

a plurality of pads each operative to provide an address for selecting any individual one of the vehicles and to provide commands to such individual one of the vehicles for operating such individual one of the vehicles in accordance with such commands,

a central station, the pads being connected to the central station,

each of the pads being operative to transmit the address and the commands from such pad to the central station for transmission by the central station to the vehicles,

each individual one of the vehicles having a light for illumination when such vehicle is addressed and commanded by the central station as a result of the address and commands from an individual one of the pads,

first means in the central station for storing the addressing by each individual one of the pads of the individual one of the vehicles,

second means in the central station for communicating a command to the individual one of the vehicles to extinguish the light in such vehicle instantaneously after the

individual one of the pads providing the address and the commands to such individual one of the vehicles becomes disconnected from the central station, and

third means in each individual one of the vehicles for extinguishing the light in such individual one of the vehicles in accordance with the communication from the central station,

fourth means in the central station for eliminating the storage of the addressing by each individual one of the pads of the individual one of the vehicles instantaneously after such individual one of the pads becomes disconnected from the central station,

[In a combination as set forth in claim 127,]

fifth means in the central station for interrogating the pads connected to the central station to determine the address and the commands from such pad to the vehicles,

sixth means for receiving in the vehicles from the central station the address and the commands provided by each of the pads upon the interrogation of such pad by the central station, and

seventh means in the central station for eliminating one of the pads from the interrogation by the central station, instantaneously after such pad becomes disconnected from the central station, without affecting the interrogation of the other pads by the central station and for providing for the addressing by any of the other pads of the vehicle previously addressed by the disconnected pad.

Claim 147, line 2, change "vehicles" to –vehicle–.

Claim 156 (Twice Amended): In combination for use with a plurality of vehicles each having an individual address an having members for moving the vehicles,

a central station,

a plurality of pads each operatively connected to the central station and each operative to provide addresses individual to any one of such vehicles and to provide commands for operating such vehicle,

the central station being operative to receive the addresses and commands from the pads and to transmit to the vehicles addresses and commands in packets each composed of a plurality of binary indications representing the address and the commands for an individual one of the vehicles,

means in the central station for transmitting the packets of the binary indications from each of the pads to the vehicles in the plurality,

each of the pads including a switch actuatable a number of times to select any one of the vehicles, the particular number of times being dependent upon the particular one of the vehicles to be addressed by the pad,

memory means in the central sation for remembering each of the vehicles addressed at any instant and the pad addressing the vehicle, and

means in the central station for preventing each of the pads from addressing one of the vehicles already being addressed by another one of the pads,

there being a plurality of light illuminable members in each pad, each of the light illuminable members being operable, when illuminated, to indicate an individual one of the vehicles,

the preventing means in the central station being operable to prevent each pad from illuminating light illuminable members individual to vehicles being addressed by the other pads.